

BEST AVAILABLE COPY**AMENDMENTS TO THE SPECIFICATION**

Please replace paragraph [0045] of the specification with the following paragraph:

[0045] A technical contribution for the ~~The~~ disclosed embodiments is the ~~have the~~ advantage of providing ~~of~~ automatic detection of possible rub events using standard sensors and data usually already installed on and around a turbomachine and communicated to an on site monitoring system. The disclosed embodiments do not require costly hardware for vibration signal conditioning for rub detection. For example phase angle data and the expensive equipment required to obtain phase angle data are not necessary for the disclosed embodiments. Instead, standard peak to peak unfiltered vibration may be used to determine possible rub events. Other advantages of the disclosed embodiments are that quick notification of possible rub events are provided, and with analysis of the obtained data, engineers and operators may prevent future rubs in the turbomachinery system.